

U.S. Department  
of Transportation

United States  
Coast Guard



Commandant  
United States Coast Guard

2100 Second Street S.W.  
Washington, DC 20593-0001  
Staff Symbol: (G-ELM)  
(202) 267-1407

COMDTINST 4105.4

7 DEC 1993

## COMMANDANT INSTRUCTION 4105.4

Subj: LONG RANGE PLANNING OF LOGISTICS SUPPORT FOR OPERATIONAL  
U.S. COAST GUARD CUTTERS

Ref: (a) Systems Acquisition Manual, COMDTINST 4150.2C  
(b) Acquisition and Management of Integrated Logistics Support (ILS) for Coast Guard  
Systems and Equipment, COMDTINST 4105.2  
(c) Operational Logistics Support Plan (OLSP) Development and Management  
Responsibility, HQINST 4081.2 (NOTAL)

1. PURPOSE. To define an overall process for systematic logistics support reviews for selected operational Coast Guard cutters. This instruction provides consistency in support procedures and information for Coast Guard organizations involved with the logistics support process. This instruction applies primarily to hull, mechanical, and electrical equipment, but is equally applicable to electronics equipment. This planning process will facilitate maintenance efforts and maximize cutter availability for operational use and improve the quality of the logistics support for operating units.
2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of supply centers, unit commanding officers, and chiefs of offices and special staff divisions in Headquarters shall ensure that the objectives and guidance provided in this instruction are followed.

COMMANDANT INSTRUCTION 4105.4

7 DEC 1993

3. SCOPE. The policy and procedures of this instruction apply to Commandant (G-E) designated Coast Guard cutter classes presently in-service. This instruction does not apply to new acquisition projects. New acquisition projects will formulate their maintenance plans and logistics support in accordance with references (a), (b), and (c).
4. POLICY. This instruction establishes procedures and formats for planning and forecasting of supply and maintenance actions in support of commissioned Coast Guard cutters. Schedules for important events shall strictly adhere to the planning process to minimize delays in maintenance availabilities and support.
5. PROCEDURES. The procedures and responsibilities in the supply and maintenance planning process are described in detail in enclosure (1). Enclosure (2) depicts the organizational and documentation relationships in the planning process. Enclosure (3) contains procedures used in the Cutter Support Review (CSR) process. Enclosure (4) is a guide for preparing Cutter Class Maintenance Plans (CCMPs). Enclosure (5) is a sample of a completed Commodity Management Plan (CMP) maintained by the Supply Centers. Enclosure (6) is a Glossary of Terms commonly used in the logistics planning process.

/s/

ROBERT E KRAMEK  
Chief of Staff

- Encl: (1) Procedures and Responsibilities for Long Range Planning of Logistics Support for Cutters
- (2) Organizational/Documentation Relationship
  - (3) Cutter Support Review Procedures
  - (4) Cutter Class Maintenance Plan (CCMP) Guidelines
  - (5) Commodity Management Plan Format
  - (6) Glossary of Terms

## **RESPONSIBILITIES AND PROCEDURES FOR LONG RANGE PLANNING OF LOGISTICS SUPPORT FOR CUTTERS**

1. General. To execute the long range logistics support planning, all involved organizations and operating units must effectively communicate with each other. This effort requires knowledge of the latest information and changes that may occur in the planning, reviewing, and updating process.
2. Schedules. Maintenance and Logistics Commands (MLCs) will coordinate and schedule drydock and dockside availabilities for each cutter on a published five-year planning cycle. Schedules shall include planned start and completion dates, as well as other pertinent milestones and planning information. Schedules must be updated/reviewed as the need dictates. Timing of reviews should take into consideration budget cycles so funding can be considered after schedules are firm. This information can be used to formulate future budget requirements. MLCs will coordinate preparation and scheduling of work prior to a cutter's maintenance availability. Procedures and guidance for that work shall be published in local organizational and operating procedures.
3. Logistics Documents.
  - a. Operational Logistics Support Plans (OLSPs) identify logistics support provided for an individual cutter class. Each cutter class, as directed by reference (c), shall have an OLSP jointly developed by Project Manager/Officer, Headquarters Facility Manager, Support Program Managers (e.g. G-ENE, G-ELM, G-TES) and MLCs as applicable. Guidelines for developing, reviewing, and updating OLSPs are contained in reference (c).
  - b. Cutter Class Maintenance Plans (CCMPs) will be developed for each cutter class using the Maintenance Support Guide (MSG) contained in the OLSP. The CCMP is the guidance document for maintenance and logistics planning and support for each cutter class. CCMPs identify critical systems/equipment, the level of repair to be accomplished, and form the basis for stocking parts by the supply centers. Enclosure (4) is a guide to assist in developing essential information contained in the CCMPs. The lead MLC shall develop the draft CCMP with assistance from Supply Centers, Curtis Bay and Baltimore, G-ELM, G-ENE, cutters, and the other MLC.

Encl. (1) to COMDTINST 4105.4

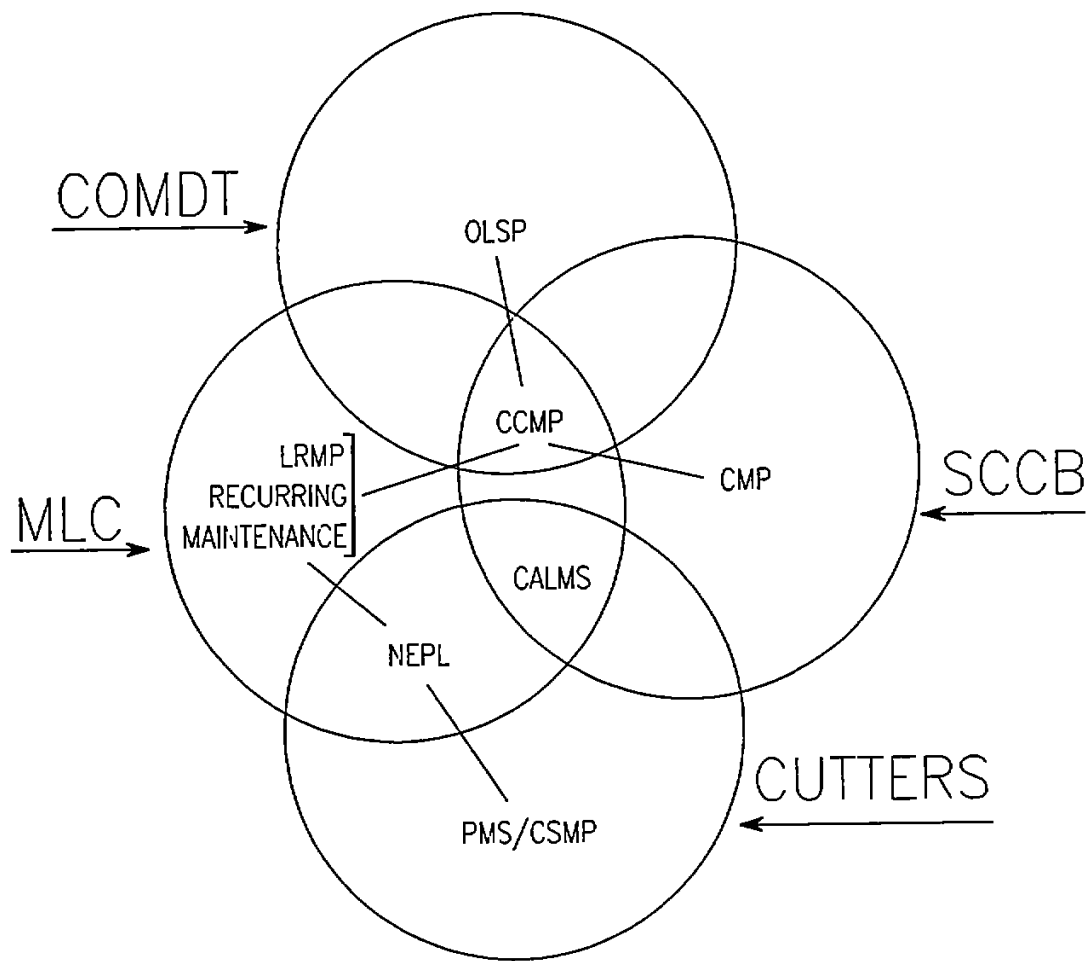
- c. Cutter Support Reviews (CSRs), as described in enclosure (3), will be coordinated by Supply Center Curtis Bay (SCCB). The CSR will meet for the purpose of reviewing and finalizing the CCMPs and developing Commodity Management Plans (CMPs). The lead MLC, with assistance from SCCB, shall publish changes/revisions to the CCMPs that result from those reviews.
- d. Commodity Management Plans (CMPs) shall be developed to support critical line items, as designated by specific CCMPs. CMPs provide specific guidance for item managers, provisioners, MLCs, and platform managers on how critical systems are to be supported. CMPs will be developed at the CSR using the CCMPs. Final CMP will be signed by the lead MLC and SCCB. Enclosure (5) is the CMP format.
- e. Long Range Maintenance Plans (LRMPs) are cutter specific and provide guidance on maintaining the cutter's major equipment. The LRMP is a five year planning document developed by the MLCs.

4. Responsibilities.

- a. Commandant (G-ENE) shall provide maintenance policy and guidance on requirements for cutters and standard boats. G-ENE shall initiate the scheduling of the CSR and ensure all preparation work is complete.
- b. Commandant (G-ELM) shall provide overall Coast Guard configuration, logistics, and supply support policy.
- c. MLC(v)s shall coordinate maintenance availabilities, SHIPALTs, and other depot level repairs with Headquarters Facility Managers. MLCs develop and maintain LRMPs. The lead MLC is responsible for coordinating the development and maintenance of CCMPs for their designated cutter classes. After the review process is complete and changes made, the MLCs will publish the updated CCMPs.
- d. Supply Centers shall be responsible for the development of CMPs for each critical line item selected by the CSR for each cutter class requiring support. The Supply Centers are responsible for staging Coast Guard managed parts and expeditiously shipping the requested parts to the designated maintenance availability site by the due date after the requisitions are received. SCCB will host the CSR and is responsible for insuring all attendees are contacted for the convening dates.

- e. Headquarters Facility Managers shall work with the MLCs to coordinate the maintenance availabilities, SHIPALTs, and other depot level repairs. Facility Managers shall also participate in the CSRs for their class of cutter. Facility Managers will be responsible for incorporating changes resulting from the CSR in the next periodic update of the OLSP.
- f. Cutter/Units shall work with the MLCs to coordinate and identify cutter maintenance needs. Cutters/units shall participate, as requested, in the CSR process.
- g. Areas, Districts, and Groups are designated Program Managers with maintenance responsibilities according to Chapter 081 of the Naval Engineering Manual (COMDTINST M9000.6 series).





**Organizational/Documentation Relationship**





### **CUTTER SUPPORT REVIEW PROCEDURES**

1. Cutter Support Review (CSR). The CSR is conducted by a Natural Working Group (NWG) responsible for integrating maintenance philosophy, actual field repair practices, and allowance documents into the Cutter Class Maintenance Plan (CCMP) published by the lead MLC. The working group ensures that logistics and maintenance needs of the cutter class are "dovetailed" so that both scheduled and casualty maintenance actions are fully supported. Specific support responsibilities by G-ENE, G-ELM, Supply Centers, and MLCs(v) are clearly delineated in the completed CMPs. This pro-active approach provides responsive and efficient support to the customer, the cutter. CSR NWG is managed and chaired by G-ENE.
2. Members. The CSR NWG consists of members from the following organizations:
  - a. The regular members are:
    - (1) Representative and team leader, G-ENE, Type Support Branch (G-ENE-1).
    - (2) Representatives from both MLCs(vr), Naval Engineering Division, Support Branch.
    - (3) Representative from G-ELM Policy Branch (G-ELM-2).
    - (4) Representatives (Platform Manager, Provisioners, Item Managers, etc.) from SCCB, Technical Support Division.
    - (5) Representative from applicable Headquarters Facility Manager.
  - b. The pro tem member(s) for the CSR are representatives from the customer community. For example, a cutter Engineering Officer or a representative from an operational Program Manager.
  - c. The following are Ad Hoc members of this working group. A representative from each of the following may be invited to attend meetings in which specific agenda items involve their processes: G-ELM Configuration Management Branch (G-ELM-5); G-ENE, Naval Engineering Resources Branch (G-ENE-3); the Coast Guard Yard; Supply Center Baltimore (SCB); G-TES, Electronics Systems

Encl. (3) to COMDTINST 4105.4

Division; G-ENE, Fleet Systems and Equipment Branch (G-ENE-2); and a Naval Engineering Support Unit (NESU).

3. CSR Functions and Deliverables. The following general functional tasks and deliverables direct and define the scope of the CSR NWG:
  - a. The working group shall identify the most operationally critical components with support problems for the cutter class. A Commodity Management Plan (CMP) will be developed for each item, ensuring support actions required by the CCMP can be implemented. The CMP shall include (but is not limited to) priorities, organizational responsibilities, quantities required annually, and methods of procurement/repair.
  - b. Provide input to the applicable Headquarters Facility Manager to ensure OLSP information is current and up-to-date.
  - c. Update applicable allowance documents. Modify all Allowance Parts Lists (APLs) to ensure compatibility with the applicable maintenance philosophy and actual field support practices.
  - d. Along with the above evaluations, ensure that appropriate definitions for and practices involving repairable equipments, insurance spares, rotatable spares, and drydock consumables are consistent in the development of the CMPs.
  - e. Review available technical and logistics documents as they apply to a cutter class and identify the need for additional documentation. Assign tasking as required.
  - f. Review the need for and recommend to G-ENE the assignments of Quality Action Teams (QAT), Tiger Teams (T/T), or Natural Working Groups (NWG) to assess problems involved with the cutter class.
  - g. Solicit pro tem and ad hoc members as appropriate.
4. CSR Location. The CSR NWG shall convene as directed by G-ENE. Location will be Supply Center Curtis Bay.

## **CUTTER CLASS MAINTENANCE PLAN (CCMP) GUIDELINES**

The CCMP format was developed by the MLCs and reviewed by the Supply Centers and Coast Guard Headquarters. The CCMP lists the minimum essential information needed for planning and providing the necessary logistics support for the scheduled drydock and dockside maintenance availability process. Figure 4.A. is a sample format to be used in developing the CCMPs. Following is an explanation and guideline for filling in each column used in the CCMP.

1. Title: SWBS Number  
  
Description: The most specific Ships Work Breakdown Structure (SWBS) number for the system/equipment being described. A number between 000 and 999.
2. Title: System  
  
Description: A brief description of the system or major equipment being described.
3. Title: Component  
  
Description: Sub-system or subassembly of major system. The number required for the specific maintenance action shall be placed in parenthesis. Individual components may be grouped in "Kits". An Inspection Kit is made up of consumable components that are used every time the maintenance action occurs. A Ready/Repair Kit is made up of components frequently used when a maintenance action occurs.
4. Title: Cycle  
  
Description: Frequency of maintenance action; usually overhaul, replacement, or testing.
5. Title: Action Required  
  
Description: Specifics of what maintenance/stocking is required and who is to take action. Broken down by Unit (organizational), MLC (intermediate/depot), and SCCB/SCB (depot). If a component is not listed, current maintenance procedures as identified by the Naval Engineering Manual, PMS Manuals, NSTM, Technical Manuals, etc. will be followed. The following frequently used terms are provided as guidance:

Renew - Replace existing component with reparable or consumable component.

Repair - Repair existing component.

Minor Maintenance - Repair/renewal action is the unit's responsibility and funded by AFC30. (Cost threshold will vary with each cutter class.)

Major Maintenance - Repair/renewal action is directed by the MLC and funded by AFC45. (Cost threshold will vary with each cutter class.)

Preserve - Remove corrosion & keep painted.

Clean - Removal of dirt, grease and oil.

Inspect - Inspect and determine condition so future maintenance action can be planned.

Reseal - Recoat with sealer or recaulk as applicable.

Remove - Remove component from cutter for further maintenance action.

Test - Arrange for and conduct test of component or system.

Install - Install component on cutter.

Hydro - Hydrostatically test the component. Drain - Remove liquid from system/component in preparation for further maintenance.

Overhaul - Conduct an overhaul of the component/system by replacing worn/damaged sub-components.

Support - SCCB/SCB will continue to support the equipment or component using existing CALMS/ERPAL documents. Stocking levels will remain "demand-driven". This term can apply to both systems and components. SCCB insurance items required for an availability will be reviewed to determine if the item designation should be altered from "insurance" to "demand driven."

Stock - SCCB/SCB will use information in quantity (Use/Pool) column of this document for stocking levels. This term will generally apply to components.

6. Title: Part Number (P/N)
- Description: Part number of item to be replaced or overhauled; or National Stock Number (NSN) (with COG) or Manufacturer's Part Number (with CAGE), if known.
7. Title: Quantity Required Each Year
- Description: Quantity of components required to support expected annual demand for entire cutter class and the quantity of components required to be in a rotatable pool to support the maintenance requirement. Quantities are based on lead time to repair or purchase new.
8. Title: SM&R Code
- Description: The Source, Maintenance and Recoverability (SM&R) Code is a five digit code that provides important information about how the part is managed. The following is a guide for interpreting the SM&R Codes:

### SCCB Source, Maintenance, & Recoverability Codes (12/92)

SOURCE		MAINTENANCE		RECOVERABILITY	
The Source Code indicates how an item is to be obtained when replacement/repair is required. It indicates whether it should be requisitioned, obtained locally or fabricated.		The Maintenance Code indicates if the item is to be replaced/repared at the User, NESU, MLC or SCCB level. A number indicates user level removal/repair authorized. A letter indicates higher than user level. The letter "Z" in the 2nd position indicates no repair		The Recoverability Code determines who may authorize disposal	
		WHO CAN REPLACE (USER)	WHO CAN REPAIR (MINOR)	MAJOR OVERHAUL OR DISPOSAL AUTHORITY	
		3rd Pos	4th Pos	5th Pos	
PA	Managed item with NSN Non-Deteriorative			Z	Nonrepairable Condemn at level indicated in Pos 3
PB	Managed item with NSN Stocked for insurance	Replace at ORG level (Minimum)	Z No Repair (Consummable)		Repair item Condemn at ORG level (Minimum)
PC	Managed item with NSN Deteriorative	0 Station, MAT 2 WL, WPB, WTGB 4 WMEC 5 WHEC 6 WAGB	0 Station, MAT 2 WL, WPB, WTGB 4 WMEC 5 WHEC 6 WAGB	0 2 4 5 6	Station, MAT WL, WPB, WTGB WMEC WHEC WAGB
PF	Non-stocked support equipment				Repairable item Condemn at Group NESU
XB	Non-stocked piece part	G H Replace at Group NESU		G H	Repairable item Condemn at MLC
MO	Non-stocked item Local manufacture	L Replace at MLC	G H L Repair at Group NESU MLC	L	Repair/Disposal Authority SCCB
KF	Kit repair component Non-stocked	D Replace at SCCB	D Repair at SCCB	D	

Encl. (4) to COMDTINST 4105.4

9. Title: Lead NESU (as applicable)

Description: The NESU assigned to assist in managing reparableables. Generally it would be the NESU closest to Indefinite Quantity (IQ) Contractor, Base Industrial or MAT that is conducting the overhaul/repair of the reparable component. If a Government Furnished Equipment Team (GFET) manages the item, "GFET" will appear in this column.

10. Title: Method of Repair

Description: Method used to bring Condition Code F assets to a Ready for Issue (RFI) condition. This will be a list, in priority of methods available to conduct repair/overhauls. When known, the typical repair of lead time (in months) will appear in parentheses. For example:

IQ contract	{IQ}
SCCB	{SCCB (24)}
Base Industrial	{IND (1)}

11. Title: Stage At

Description: Location of RFI asset.

Page 3

Revised: 10 Mar 93

SWB	System	Component	Cycle	Unit	Action Required	SCB	Part Number	Qty Req	SNR Code	Lead	Repair Method	Stage At
123	Tanks & Voids	Clean Ballast, feed & potable water tanks	3 yr Cond.	Clean/Inspect Preserve-Minor	None	None						
123												
123												
150	Deck house	Expansion joint (1)	10 yr Cond.	None	Renew	None	Dwg 00000000				IG, Avail	
150				Inspect/Clean		None						
160	Stern tube	Stern tube (2)	6 yr Cond.	None	Insp/Preserve/Rpr	Stock	Dwg 00000000	0/2				SCCB
167	Structural closure	Water Weather, & Puma Tight	Cond.	Insp/Preserve/Rpr	Renew	Support						
167												
171	Mast	Mast	Cond.	Insp/Preserve	Stage	None						
180	Foundations	Equip Foundations	Cond.	Insp/Preserve	Major Repair	None						
192	Ut Compartment	Compartment	3 yr Cond.	Sonic Test	None	None						
192					AirTest after rpr	None						
202	MPCHS	MPCHS (1)	Cond.	Minor	Major	Support						
233	Main diesel eng	Governor (2)	9K hr	Remove/Install	Overhaul/Repair	Stock	01-107-6898	0/2				SCCB
233		Turbocharger (2)	1 yr	Inspect	Repair/Renew	None	01-118-7979	3/5				MESU
233		Cylinder heads (36)	9K hr	Remove/Install	Overhaul/Repair/Renew	None	01-139-1701	156/156			IO	
233		Center section	18K hr	Install	Pump Kit	Stock	01-247-0985	3/5			Port IO, Ind, MAT	SCCB
233		Crankshaft (2)	Cond.	None	Repair	Stock	01-106-8671	1/2			025K	SCCB
233		Block (2)	Cond.	None	Repair	Stock	01-106-8671	0/1				SCCB
233		Starter motor CW (1)	Cond.	Minor	Major	Stock	01-200-8976	1/2				SCCB
233		Starter motor CCW(1)	Cond.	Minor	Major	Stock	01-301-0323	1/2				SCCB
233		Attached pumps	6K hr Cond.	Inspect	None	Stock						
233		Raw water (2)		Minor	Major/Renew	Stock	01-074-9213	2/4				SCCB
233		Jacket water-CW (1)				Stock	01-118-6393	2/4				SCCB
233		Jacket water-CCW(1)				Stock	01-118-2004	2/4				SCCB
233		Lube oil (2)-CW (1)				Stock	01-107-9564	2/4				SCCB
233		Lube oil (2)-CCW(1)				Stock	01-118-7955	2/4				SCCB
233		Proflube (2)				Stock	01-118-7955	1/2				SCCB

Figure 4.A. CCMP format.





# SCCB Commodity Management Plan

Cmp Control # 180CMP-202/012

Date: 08/26/93 Rev: A  
SWBS: 202

NSN(s): -

Price: \$650.00

Repair Code:

Nomenclature: DC DRIVER, VOGUE UNIT

LRC: AAC: Commodity Code:

Major Sys Code: QTRY Demand: 0.00

Cutter Class(es): 180

Cutter Populations: 14

No NSN Installed/Ship: 2

APL(s): P/O

Case Number: 21418

P/N: SLC1025-19

SM&amp;R Code: PA2ZZ

CAGE: 65744

Stocking Requirements: 1 MLC Use: 1 MLC Rotatable Pool: 0

Reference: (a) 180' WLB Cutter Support Review of 15-16 June 93

Cutter Application: WLB 297,388,389,392,-394,397,401-407 (total 14)  
NOT applicable to 180 WMEC CITRIS

Discussion: The DC Driver is a component within the Voltage Output Generator Excitor (VOGE) (180CMP-202/011). The VOGUE replaced the old Main Propulsion switchboard 'Silverstat' voltage regulator.

**ACTION:**

Responsibility DateComp/Int

NOTE - PLEASE ADVISE IF MISTAKES OR CHANGES ARE REQUIRED TO THIS CMP. UPON COMPLETION OF THE ACTION ITEMS, INITIAL WITH DATE COMPLETED AND RETURN TO THE SCCB 180' PLATFORM MANAGER (CODE 4410).

1. Obtain NSN with Repair Code of 'C', 4211  
Commodity Code of 'N', Acquisition Advise  
Code of 'C'. Add as a line item to APL  
developed for 180CMP-202/011 with SMR  
code of PA2ZZ..

2. Update 180 CCMP by deleting 'SCCB' to the MLC PAC  
'STAGE AT' column and add NSN to CCMP (when  
provided.)

3. Establish a safety level of one (1). IM

Approved: SCCB PM \_\_\_\_\_ Code 4000A \_\_\_\_\_

MLC Rep \_\_\_\_\_ Code 4300 \_\_\_\_\_

(Reverse Blank)



## **GLOSSARY OF TERMS**

Combined Allowances for Logistics, Maintenance and Support (CALMS). An individual cutter's list of equipments and components required to perform its operational assignment.

Commodity Management Plan (CMP). The CMP represents a consensus of projected supply and demand requirements for an individual line item of supply. Its purpose is to provide responsible efficient, early identification of upcoming fleet needs.

Current Ship's Maintenance Projects (CSMP). Used for the planning of maintenance, repair and alterations that do not affect the immediate operational requirements of the cutters. This is for maintenance work beyond the unit's assigned personnel.

Cutter Class Maintenance Plan (CCMP). A document that identifies, by specific cutter class, level of repair and maintenance significant information for maintaining critical or maintenance essential systems and equipment. This document is used by the cutters, NESUs, MLCs, and supply centers to facilitate supply and maintenance planning.

Cutter Support Review (CSR). A periodic logistics support review for the purpose of reviewing/updating CCMPs and CMPs ensuring schedules, operation and logistics support requirements are considered.

Dockside Repair. Repair work performed dockside usually at the cutter's homeport by one or more contractors. These are usually performed midway between scheduled drydocking.

Drydocking. Major repair work accomplished at a commercial or government facility.

Lead Maintenance and Logistics Commands (MLCs). Coordination authority for maintenance and logistics issues for a particular cutter class, designated by the Naval Engineering Program Guidance Team.

Long Range Maintenance Plan (LRMP). A plan which describes a cutter, its condition after each planned drydock availability and a five-year schedule to improve its materiel condition.

Maintenance Support Guide (MSG). A listing of all major systems on a particular class of cutter. This is part of the OLSP.

Naval Engineering Maintenance Logistics Working Group (NEMLWG).

A working group with regular representatives from G-ENE, G-ELM, G-AFM, CG Yard, MLCs, SCCB and ad hoc members as needed. The NEMLWG is chartered to ensure maintenance philosophies and allowance documents work together to support actual field repair practices for the fleet.

Encl. (6) to COMDTINST 4105.4

Naval Engineering Project Listing (NEPL). Cutter specific listing of all required maintenance for a cutter not accounted for in the cutters PMS.

Operational Logistics Support Plan (OLSP). A logistics document that identifies the logistics support for an individual cutter class and is provided to the Headquarters Facility Manager. The

OLSP is developed by the Project Manager/Officer and is turned over to the Facility Manager 90 days prior to the first introduction of the platform or equipment.

Preventative Maintenance System (PMS). The minimum maintenance requirements and procedures for equipment aboard cutters. Procedures such as inspecting, cleaning and reconditioning machinery and equipment to counter the effects of the hostile seagoing environment and operating wear and tear.